Book Review

Specialist Periodical Reports: Photochemistry, Vol. 10, Senior Reporter, D. Bryce-Smith, published by the Chemical Society, London, 1979; 717 + xxiv pp.; price £40.00.
ISBN 0 85186 590 9

One of my pleasant annual tasks over the last few years has been to review the Specialist Periodical Reports on Photochemistry. Volume 10 follows in the tradition established by its predecessors, and once again provides an excellent and apparently comprehensive survey of work published during the review period. For volume 10, this period is generally July 1977 June 1978, although the chapters on instrumentation and on chemical aspects of photobiology cover the period from July 1976 since they are part of the group of biennial reviews.

The style and subdivision of the book are very similar to those of the earlier volumes. As to division, there are six main "parts". The first four of these deal with physical, inorganic and organometallic, organic, and polymer photochemistry. There then follow parts devoted to solar energy conversion and to photobiology. Developments in spectroscopic and theoretical fields fall in the alternate part of the biennial cycle. Thus the reviews provide a virtually complete coverage of the work done in photochemistry. Professor Bryce-Smith, in his introductory review, points out that cross-fertilization between physical and organic findings continues to be rather rare. This point brings us to the question of style. Although Bryce-Smith stresses the need to excite photochemists with aspects of photochemistry outside their own specialist fields, it is not clear to me that this book will do it. The writing has to be terse, in the interests of accommodating a report of essentially all work published in the review period. What the authors do — and they do it very well — is to link together a series of abstracts according to a chemically sensible pattern. But the reader really needs to have some idea of the concepts of, and the underlying motivation for, the work before he can use the reviews. For this reason, I suspect that this particular work is unlikely to generate the "excitement" hoped for by the Senior Reporter. Straight reading of the text is very heavy going, and I would have thought cross-fertilization and stimulation of interest would be more likely to be achieved with articles not intended to be comprehensive surveys restricted to a one-year period. Whether the Photochemistry Reports should be split into several parts seems to me to depend not on the cross-fertilization issue, but on other arguments, such as production economics and the convenience of having all the areas reviewed under one cover. In this volume the balance of topics

lies with 219 pages for physical photochemistry (including a 116-page chapter on developments in instrumentation and techniques) and 365 pages of organic photochemistry, if the polymer and biological aspects are included.

My remarks about the way the book is written are not intended to be critical, but rather to explain the nature of the volume. The Specialist Periodical Reports are essentially works of reference that provide a more ready, and more organized, access to the published literature than, say, Chemical Abstracts. As in previous years, the team of reporters has done an enormous amount of work in finding, and sorting out, the material that appeared. Professor Bryce-Smith and his colleagues have again earned our gratitude for compiling a book that is most valuable within the limitations discussed.

R. P. WAYNE